?rinted:18-06-2004

CLMSPAMD

EP03747326 1- PCTUS 03 12901

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Claims:

1. A compound of the Formula:

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$$A^0 \longrightarrow N \longrightarrow N \longrightarrow A^0$$

X = C, SO

10 wherein:

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 A^0 is A^1 , A^2 or W^3 with the proviso that the compound includes at least one A^1 ; A^1 is:

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A² is:

20 A³ is:

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 Y^1 is independently O, S, N(R^x), N(O)(R^x), N(OR^x), N(O)(OR^x), or N(N(R^x)(R^x));

 Y^2 is independently a bond, O, N(R^x), N(O)(R^x), N(OR^x), N(O)(OR^x), N(N(R^x)(, R^x)), -S(O)_{M2}-, or -S(O)_{M2}-, Y^2 -;

R^x is independently H, R¹, W³, a protecting group, or the formula:

Ry is independently H, W3, R2 or a protecting group;

R¹ is independently H or an alkyl of 1 to 18 carbon atoms;

R² is independently H, R¹, R³ or R⁴ wherein each R⁴ is independently substituted with 0 to 3 R³ groups, or taken together at a carbon atom, two R² groups form a ring of 3 to 8 carbons and the ring may be substituted with 0 to 3 R³ groups:

 R^3 is R^{3a} , R^{3b} , R^{3c} or R^{3d} , provided that when R^3 is bound to a heteroatom, then R^3 is R^{3c} or R^{3d} ;

 R^{3a} is F, Cl, Br, I, -CN, N₃ or -NO₂;

R^{3b} is Y1:

 R^{3c} is $-R^x$, $-N(R^x)(R^x)$, $-SR^x$, $-S(O)R^x$, $-S(O)_2R^x$, $-S(O)(OR^x)$, $-S(O)_2(OR^x)$, $-OC(Y^1)R^x$, $-OC(Y^1)OR^x$, $-OC(Y^1)(N(R^x)(R^x))$, $-SC(Y^1)R^x$, $-SC(Y^1)OR^x$.

-SC(Y1)(N(R*)(R*)), -N(R*)C(Y1)R*, -N(R*)C(Y1)OR*, or -

-SC(Y')(N(R')(R')), -N(R')C(Y')R', -N(R')C(Y')CR', 0N(R')C(Y')(N(R')(R'));

 R^{3d} is $-C(Y^1)R^x$. $-C(Y^1)OR^x$ or $-C(Y^1)(N(R^x)(R^x))$:

R⁴ is an alkyl of 1 to 18 carbon atoms, alkenyl of 2 to 18 carbon atoms, or alkynyl of 2 to 18 carbon atoms;

R⁵ is R⁴ wherein each R⁴ is substituted with 0 to 3 R³ groups;

W³ is W⁴ or W⁵:

 W^4 is R^5 , $-C(Y^1)R^5$, $-C(Y^1)W^5$, $-SO_2R^5$, or $-SO_2W^5$;

 W^5 is carbocycle or heterocycle wherein W^5 is independently substituted with 0 to 3 R^2 groups;

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W⁶ is W³ independently substituted with 1, 2, or 3 A³ groups;

W⁷ is a heterocycle bonded through a nitrogen atom of said heterocycle and independently substituted with 0, 1 or 2 A⁰ groups;

M2 is 0, 1 or 2;

M12a is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12;

M12b is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12:

M1a, M1c, and M1d are independently 0 or 1; and

M12c is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or 12, and

the enantiomers and diastereomers, as well as the physiologically

10 acceptable salts and prodrugs thereof.

2. A compound of claim 1 selected from:

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3. A compound of claim 2 having the formula:

A compound of claim 1 having the formula:

$$A^{2} \longrightarrow \begin{matrix} H & OH & A^{2} & OW^{3} \\ N & N & N & N \end{matrix}$$

5. The compound of claim 4 having the formula:

6. A compound of claim 5 having the formula:

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7. A compound of claim 6 having the formula:

8. A compound of claim 7 having the formula:

wherein R_1 and R_2 are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

9. A compound of claim 7 having the formula:

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wherein R_1 and R_2 are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxymethyl.

5 10. A compound of claim 7 having the formula:

wherein R₁ and R₂ are independently selected from hydroxy, methoxy, 10 ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxy-methyl.

11. A compound of claim 7 having the formula:

wherein R_1 and R_2 are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, and O-pivaloyloxy-methyl.

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12. A compound of claim 7 having the formula:

wherein R_1 and R_2 are independently selected from -NR where R is C_1 -- C_6 alkyl or an amino acid ester.

13. The compound of claim 12 wherein R₁ and R₂ are independently selected from –NMe, -NEt, Gly-Et, Ala-Et, Aba-Er, Val-Et, Leu-Et, Phe-Bu, and Phe-Et.

14. A compound of claim 7 having the formula:

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wherein R₁ and R₂ are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, Opivaloyloxymethyl, and a lactate ester.

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- 15. The compound of claim 14 wherein R₁ is hydroxy, methoxy, ethoxy. trifluoroethoxy, isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and R2 is Glc-Et, Lac-Me, Lac-Et, Lac-iPr, Lac-Bu, Lac-EtMor, Lac-Me, Lac-Et. Lac-Bn, Lac-OH, Lac-OH, Hba-Et, Hba-tBu, Hba-OH, MeBut-Et, or DiMePro-Me.
- 16. A compound of claim 15 where the lactate ester is the (R) configuration.
- A compound of claim 15 where the lactate ester is the (S) configuration. 17

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18. A compound of claim 7 having the formula:

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- wherein R₁ is phenoxy, benzyloxy, ethoxy, trifluoroethoxy, or hydroxyl; and R₂ is an amino acid ester.
- 19.
- The compound of claim 18 wherein the amino acid ester is selected from Gly-Bu, Ala-Me, Ala-Et, Ala-iPr, (D)Ala-iPr, Ala-Bu, Aba-Et, Aba-Bu, and Ala-OH.

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20. A compound of claim 7 having the formula:

- wherein R_1 and R_2 are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, O-pivaloyloxy-methyl, an amino acid ester and a lactate ester.
- 21. The compound of claim 20 wherein R₁ is hydroxy, methoxy, ethoxy, trifluoroethoxy, Isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and R₂ is a lactate ester selected from Glc-Et, Lac-Me, Lac-Et, Lac-IPr, Lac-Bu, Lac-EtMor, Lac-Me, Lac-Et, Lac-Bn, Lac-OH, Lac-OH, Hba-Et, Hba-tBu, Hba-OH, MeBut-Et, and DIMePro-Me.
- 15 22. The compound of claim 20 wherein R₁ is hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, substituted phenoxy or benzyloxy; and R₂ is an amino acid ester is selected from Gly-Bu, Ala-Me, Ala-Et, Ala-iPr, (D)Ala-iPr, Ala-Bu, Aba-Et, Aba-Bu, and Ala-OH.
- 20 23. A compound of claim 1 having the formula:

wherein A¹ is selected from the formulas:

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$$-CH_{2}-W^{5a} - \begin{pmatrix} R^{2} & R^{2} & 0 \\ M12a & R_{2} & 0 \\ M12a & R_{2} & 0 \end{pmatrix}$$

$$-CH_{2}-NH-W^{5a} - \begin{pmatrix} R^{2} & R^{2} & 0 \\ M12a & R_{2} & 0 \\ M12a & R_{2} & 0 \end{pmatrix}$$

$$-CH_{2}-W^{5a}-O - \begin{pmatrix} R^{2} & R^{2} & 0 \\ M12a & R_{2} & 0 \\ M12a & R_{2} & 0 \end{pmatrix}$$

$$-CH_{2}-W^{5a}-O - \begin{pmatrix} R^{2} & R^{2} & 0 \\ M12a & R_{2} & 0 \\ M12a & R_{2} & 0 \end{pmatrix}$$

R₁ and R₂ are independently selected from hydroxy, methoxy, ethoxy, trifluoroethoxy, isopropoxy, phenoxy, benzyloxy, O-pivaloyloxymethyl, an amino acid ester and a lactate ester; and W^{5a} is selected from the formulas:

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A compound of claim 23 wherein A¹ is selected from the formulas:

- The use of a compound according to any one of claims 1 to 24 in the 25. manufacture of a medicament for the treatment of HIV infection.
- The use of a compound according to any one of claims 1 to 24 in the 10 26. manufacture of a medicament for the treatment of disorders affecting white blood cells.
- A pharmaceutical composition comprising a compound according to anyone **27**. of claims 1 to 24 and conventional carriers and excipients. 15